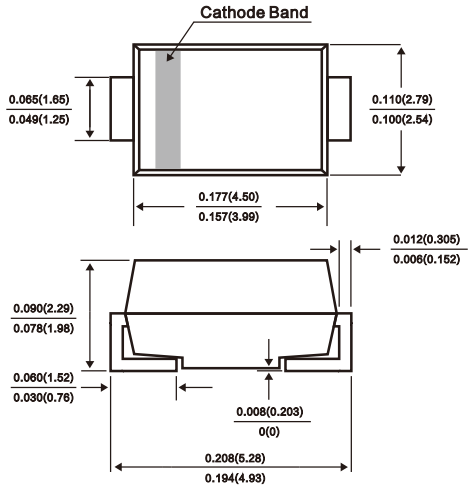
FEATURES

- Schottky barrier rectifier
- Guardring protection
- Low forward voltage
- Reverse energy tested
- High current capability
- Extremely low thermal resistance

SMA(DO-214AC)



Dimensions in inches and (millimeters)

Mechanical Data

Case: SMA molded plastic body

Polarity: Color band denotes cathode end

Mounting position: ANY

Weight: 0.002 ounces, 0.064 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60Hz,resistive or inductive load,for capacitive load current derate by 20%.

	SYMBOLS	SS12	SS13	SS14	SS15	SS16	SS18	SS110	SS115	SS120	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	20	30	40	50	60	80	100	150	200	VOLTS
Maximum RMS voltage	V_{RMS}	14	21	28	35	42	56	70	105	140	VOLTS
Maximum DC blocking voltage	V_{DC}	20	30	40	50	60	80	100	150	200	VOLTS
Maximum average forward rectified current at T_L(see fig.1)	$I_{(AV)}$	1.0									Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0									Amps
Maximum instantaneous forward voltage at 1.0A	V_F	0.45	0.55		0.70		0.85			0.95	Volts
Maximum DC reverse current T_A=25℃	I_R	0.5							0.2		mA
at rated DC blocking voltage T_A=100℃		10.0					5.0		2.0		
Typical junction capacitance (NOTE 1)	C_J	110			90						pF
Typical thermal resistance (NOTE 2)	$R_{\theta JA}$	88.0									°C/W
Operating junction temperature range	T_J,	-50 to +125					-50 to +150				°C
Storage temperature range	T_{STG}	-50 to +150									°C

Note:1.Measured at 1MHz and applied reverse voltage of 4.0V D.C.
2.P.C.B. mounted with 0.2x0.2"(5.0x5.0mm) copper pad areas

FIG.1 – FORWARD DERATING CURVE

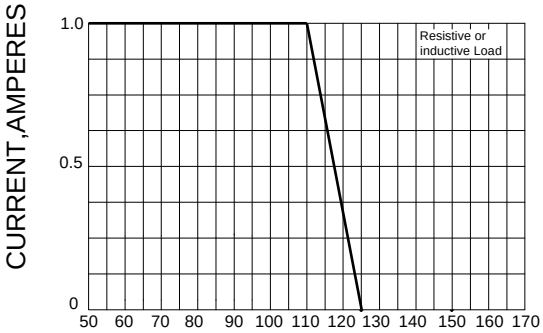


FIG.2– PEAK FORWARD SURGE CURRENT

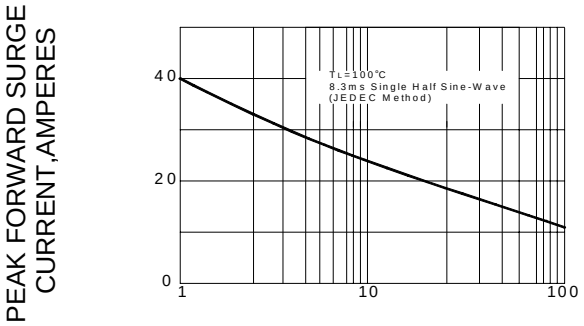


FIG.3 – TYPICAL FORWARD CHARACTERISTICS

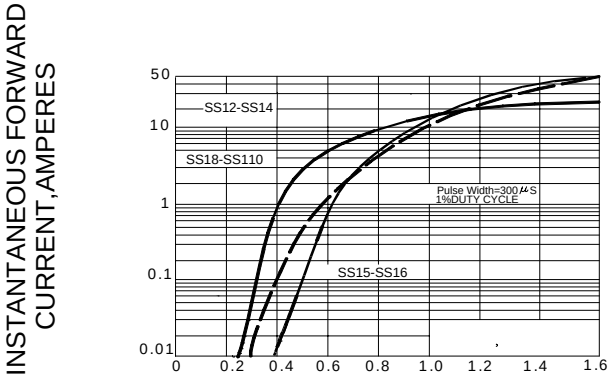


FIG.4 – TYPICAL REVERSE CHARACTERISTICS